

## INFORMATION DISCLOSURE CITATION

(C10126100000/ OFKIF)

(Use several sheets if necessary)

ATTY. DOCKET NO.

6510-107CIP2

SERIAL NO.

09/645,078

APPLICANT

Bistrup et al.

FILING DATE

August 23, 2000

GROUP

163/1623

## U.S. PATENT DOCUMENTS

RECEIVED

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
msy	AA	5,185,326	02/09/1993	Muller, et al.			FEB 06 2001
	AB	5,227,369	07/13/1993	Rosen, et al.			TECH CENTER 1600/2900
	AC	5,318,890	06/07/1994	Rosen, et al.			
	AD	5,580,862	12/03/1996	Rosen, et al.			
	AE	5,695,752	12/09/1997	Rosen, et al.			
	AF	5,827,817	10/27/1998	Larsen et al.			
	AG	5,955,325	09/21/1999	Habuchi			

## FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation
msy	AH	0 821 066 A1	01/28/1998	EP			Yes No

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

msy	AI	Baumhueter, Susanne, et al., (1993) "Binding of L-Selectin to the Vascular Sialomucin CD34," <i>Science</i> , Vol. 262:436-438.
	AJ	Bertozzi, Carolyn, et al., (1995) "Sulfated Dissacharide Inhibitors of L-Selectin: Deriving Structural Leads from a Physiological Selectin Ligand," <i>Biochemistry</i> , Vol. 34(44):14271-14278.
	AK	Boukerche, Habib, et al., (1996) "A Monoclonal Antibody Directed Against A Granule Membrane Glycoprotein (GMP-140/PADGEM, P-Selectin, CD62P) Inhibits Ristocetin-Induced Platelet Aggregation," <i>British Journal of Haematology</i> , Vol. 92:442-451.
	AL	Carter et al. (1988) "Enzymatic Sulfation of mucus glycoprotein in gastric mucosa." <i>J. Biol. Chem.</i> , Vol. 263(24):11977-11984
	AM	Celi, Alessandro, et al., (1997) "Platelet-Leukocyte-Endothelial Cell Interaction On The Blood Vessel Wall," <i>Seminars in Hematology</i> , Vol. 34(4):327-335.
	AN	Crommie, Deidre, et al., (1995) "Biosynthesis of GlyCAM-1, a Mucin-Like Ligand for L-Selectin," <i>The Journal of Biological Chemistry</i> , Vol. 270(38) :22614-22624.
	AO	Frenette, Paul S., et al., (1995) "Platelets Roll on Stimulated Endothelium <i>In Vivo</i> : An Interaction Mediated By Endothelial P-Selectin," <i>Proc. Natl. Acad. Sci.</i> , Vol. 92:7450-7454.
msy	AP	Fukuta et al. (1997) "Molecular Cloning and Characterization of Human Keratan Sulfate Gal-6-Sulfotransferase." <i>J. Biol. Chem.</i> , Vol. 272(51):32321-32328.

EXAMINER

M. A. Moran

DATE CONSIDERED

3/10/03

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE CITATION</b> (01012610000/ OFFICE OF THE ATTORNEY GENERAL) (Use several sheets if necessary)		<b>ATTY. DOCKET NO.</b> 6510-107CIP2	<b>SERIAL NO.</b> 09/645,078
		<b>APPLICANT</b> Bistrup et al.	
		<b>FILING DATE</b> August 23, 2000	<b>GROUP</b> 1631 1623
<b>RECEIVED</b> <b>FEB 06 2001</b> <b>660/2900</b>			
MAY ↓	AQ	Fukuta, Masakazu, et al., (1995) "Molecular Cloning and Expression of Chick Chondrocyte Chondroitin 6-Sulfotransferase," <i>The Journal of Biological Chemistry</i> , Vol. 270(31):18575-18580.	
	AR	Fukuta, Masakazu et al., (1997) "Molecular Cloning and Characterization of Human Keratan Sulfate Gal-6-Sulfotransferase," <i>The Journal of Biological Chemistry</i> , Vol. 272 (51):32321-32328	
	AS	Girard, Jean-Philippe, et al., (1995) "High Endothelial Venules (HEVs): Specialized Endothelium For Lymphocyte Migration," <i>Immunology Today</i> , Vol. 16(9):449-457.	
	AT	Habuchi, Osami, et al., (1997) "Sulfation of Sialyl Lactosamine Oligosaccharides By Chondroitin 6-Sulfotransferase," <i>Glycobiology</i> , Vol. 7(3):405-412.	
	AU	Habuchi, Osami, et al., (1996) "Enzymatic Sulfation of Galactose Residue of Keratan Sulfate By Chondroitin 6-Sulfotransferase," <i>Glycobiology</i> , Vol. 6(1):51-57.	
	AV	Habuchi, Osami, et al., (1993) "Purification of Chondroitin 6-Sulfotransferase Secreted from Cultured Chick Embryo Chondrocytes," <i>The Journal of Biological Chemistry</i> , Vol. 268(29):21968-21974.	
	AW	Habuchi, Hiroko, et al., (1998) A Molecular Characterization and Expression of Heparan-Sulfate 6-Sulfotransferase, <i>The Journal of Biological Chemistry</i> , Vol. 273(15):9208-9213.	
	AX	Hemmerich, Stefan, et al., (1995) "Structure of the O-Glycans in GlyCAM-1, An Endothelial-Derived Ligand for L-Selectin," <i>The Journal of Biological Chemistry</i> , Vol. 270(20):12035-12047.	
	AY	Hemmerich, Stefan, et al., (1994) "Sulfation-Dependent Recognition of High Endothelial Venules (HEV)-Ligands by L-Selectin and MECA 79, An Adhesion-Blocking Monoclonal Antibody," <i>The Journal of Experimental Medicine</i> , Vol. 180:2219-2226.	
	AZ	Hemmerich, Stefan, et al., (1994) "6'-Sulfated Sialyl Lewis x Is a Major capping Group of GlyCAM-1," <i>Biochemistry</i> , Vol. 33(16):4830-4835.	
	BA	Hemmerich, Stefan, et al., (1994) "Identification of the Sulfated monosaccharides of GlyCAM-1, an Endothelial-Derived Ligand for L-Selectin," <i>Biochemistry</i> , Vol. 33(16):4820-4829.	
	BB	Hillier, Marra M., et al., "The WashU-HHMI Mouse EST Project," <i>Nucleotide Query</i> (1996) Accession Number AA522184.	
	BC	Hooper, Lora V., et al., (1996) "From Legumes to Leukocytes: Biological Roles For Sulfated Carbohydrates," <i>The FASEB Journal</i> , Vol. 10:1137-1146.	
	BD	Koenig, Andrea, et al., (1997) "Selectin Inhibition: Synthesis and Evaluation of Novel Sialylated, Sulfated and Fucosylated Oligosaccharides, Including The Major Capping Group of GlyCAM-1," <i>Glycobiology</i> , Vol. 7(1):79-93.	
	BE	Lasky, Laurence A., et al., (1992) "An Endothelial Ligand for L-Selectin Is a Novel Mucin-Like Molecule," <i>Cell</i> , Vol. 69:927-938.	
	BF	Mitsuoka, Chikako, et al., (1998) An Identification of a Major Carbohydrate Capping Group of the L-Selectin Ligand on High Endothelial Venules in Human Lymph Nodes as 6-Sulfo Sialyl Lewis X," <i>The Journal of Biological Chemistry</i> , Vol. 273(18):11225-11233.	
	BG	Rosen, Steven D., et al., (1994) "The Selectins and their Ligands," <i>Current Opinion in Cell Biology</i> , Vol. 6:663-673.	
	BH	Sawada, Mikiko, et al., (1993) "Specific Expression of a Complex Sialyl Lewis X Antigen on High Endothelial Venules of Human Lymph Nodes: Possible Candidate for L-Selectin Ligand," <i>Biochemical and Biophysical Research Communications</i> , Vol. 193(1):337-347.	
MAY ↓	BI	Spiro et al. (1996) "Characterization of a rat liver Golgi sulphotransferase responsible for the 6-O-sulphation of N-acetylglucosamine residues in B-linkage to mannose: role in assembly of sialyl-galactosyl-N-acetylglucosamine 6-sulphate sequence of N-linked oligosaccharides." <i>Biochem. J.</i> , Vol. 319(1):209-216.	

EXAMINER

M G Moran

DATE CONSIDERED

3/10/03

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<b>INFORMATION DISCLOSURE CITATION</b> (010261 0000/ OFKGF) (Use several sheets if necessary)		<b>ATTY. DOCKET NO.</b> 6510-107CIP2	<b>SERIAL NO.</b> 09/645,078
		<b>APPLICANT</b> Bistrup et al.	
		<b>FILING DATE</b> August 23, 2000	<b>GROUP</b> 1631 1623
msy	BJ	Spiro, Robert G., et al., (1998) "Characterization of a Spleen Sulphotransferase Responsible for the 6-O-Sulphation of the Galactose Residue in Sialyl-N-Acetyl-Lactosamine Sequences," <i>Biochem J.</i> , Vol. 331:265-271.	
msy	BK	Tsuboi, Shigeru, et al., (1996) "6'-Sulfo Sialyl Le <sup>x</sup> but Not 6-Sulfo Sialyl Le <sup>x</sup> Expressed on the Cell Surface Supports L-Selectin-Mediated Adhesion," <i>The Journal of Biological Chemistry</i> Vol. 271(44):27213-27216.	
msy	BL	Yoshino, Kochichiro, et al., (1997) "Studies on Selectin Blockers. 4. Structure-Function Relationship of Sulfated Sialyl Lewis X Hexasaccharide Ceramides Toward E-, P-, and L-Selectin Binding," <i>J. Med. Chem.</i> , Vol. 40:455-462.	
msy	BM	Arbonés et al. (1994) "Lymphocyte homing and leukocyte rolling and migration are impaired in L-selectin-deficient mice." <i>Immunity</i> , Vol. 1(4):247-60.	
msy	BN	Aruffo et al. (1987) "Molecular cloning of a CD28 cDNA by a high-efficiency COS cell expression system." <i>Proc Natl Acad Sci U S A.</i> , Vol. 84(23):8573-7.	
msy	BO	Bierhuizen et al. (1992) "Expression cloning of a cDNA encoding UDP-GlcNAc:Gal beta 1-3-GalNAc-R (GlcNAc to GalNAc) beta 1-6GlcNAc transferase by gene transfer into CHO cells expressing polyoma large tumor antigen." <i>Proc Natl Acad Sci U S A.</i> , Vol. 89(19):9326-330.	
msy	BP	Fukuta et al. (1998) "Molecular cloning and expression of human chondroitin 6-sulfotransferase." <i>Biochem Biophys Acta.</i> , Vol. 1399(1):57-61.	
msy	BQ	Girard et al. (1995) "Cloning from purified high endothelial venule cells of hevin, a close relative of the antiadhesive extracellular matrix protein SPARC." <i>Immunity</i> , Vol. 2(1):113-23.	
msy	BR	Imai et al. (1993) "Sulphation requirement for GlyCAM-1, an endothelial ligand for L-selectin." <i>Nature</i> , Vol. 361(6412):555-7.	
msy	BS	Imai et al. (1993) "Direct demonstration of heterogeneous, sulfated O-linked carbohydrate chains on an endothelial ligand for L-selectin." <i>Glycoconj J.</i> , Vol. 10(1):34-9.	
msy	BT	Kakuta et al. (1998) "Conserved structural motifs in the sulfotransferase family." <i>Trends Biochem Sci.</i> , Vol. 23(4):129-30.	
msy	BU	Li et al. (1996) "Post-translational modifications of recombinant P-selectin glycoprotein ligand-1 required for binding to P- and E-selectin." <i>J Biol Chem.</i> , Vol. 271(6):3255-64.	
msy	BV	Malý et al. (1996) "The alpha(1,3)fucosyltransferase Fuc-TVII controls leukocyte trafficking through an essential role in L-, E-, and P-selectin ligand biosynthesis." <i>Cell</i> , Vol. 86(4):643-53.	
msy	BW	Schall (1997) "Fractalkine--a strange attractor in the chemokine landscape." <i>Immunol Today</i> , Vol. 18(4):147	
msy	BX	Shworak et al. (1997) "Molecular cloning and expression of mouse and human cDNAs encoding heparan sulfate D-glucosaminyl 3-O-sulfotransferase." <i>J Biol Chem</i> , Vol. 272(44):28008-19.	
msy	BY	Uchimura et al. (1998) "Human N-acetylglucosamine-6-O-sulfotransferase involved in the biosynthesis of 6-sulfo sialyl Lewis X: molecular cloning, chromosomal mapping, and expression in various organs and tumor cells." <i>J Biochem (Tokyo)</i> , Vol. 124(3):670-8.	

F:\forms\word 2k forms\form PTO-1449.doc

<b>EXAMINER</b> MA Moran	<b>DATE CONSIDERED</b> 3/10/03
<b>EXAMINER:</b> Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Please type a plus sign (+) inside this box →

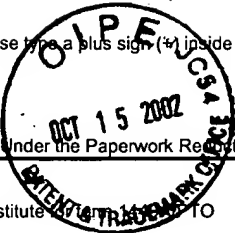


PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

 <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p><i>(use as many sheets as necessary)</i></p>			<p><b>Complete if Known</b></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>09/645,078</td> </tr> <tr> <td>Filing Date</td> <td>August 23, 2000</td> </tr> <tr> <td>First Named Inventor</td> <td>Bistrup</td> </tr> <tr> <td>Group Art Unit</td> <td>4632-1631</td> </tr> <tr> <td>Examiner Name</td> <td>M. Moran</td> </tr> <tr> <td>Attorney Docket Number</td> <td>UCAL-107CIP2</td> </tr> </table>		Application Number	09/645,078	Filing Date	August 23, 2000	First Named Inventor	Bistrup	Group Art Unit	4632-1631	Examiner Name	M. Moran	Attorney Docket Number	UCAL-107CIP2
Application Number	09/645,078															
Filing Date	August 23, 2000															
First Named Inventor	Bistrup															
Group Art Unit	4632-1631															
Examiner Name	M. Moran															
Attorney Docket Number	UCAL-107CIP2															
Sheet	1	of	1													

RECEIVED

OCT 17 2002

TECH CENTER 1600/2900

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Documents		Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, columns, lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
msy		6,265,192		The Regents of the University of California BISTRUP et al.	07-24-2001	
msy		6,365,365		The Regents of the University of California BISTRUP et al.	04-02-2002	

FOREIGN PATENT DOCUMENTS								
Examiner Initials'	Cite No. <sup>1</sup>	Foreign Patent Documents			Name of Patentee or Applicant of Cited Documents	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS		
Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

Examiner Signature <i>M. Moran</i>	Date Considered <i>3/10/03</i>
------------------------------------	--------------------------------

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.